

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

HOBBS, Steven E. et al.

Title: **SYSTEM AND METHOD FOR
PERFORMING MULTIPLE PARALLEL
CHROMATOGRAPHIC SEPARATIONS**

Serial Number: 10/696,354

Filed: October 28, 2003

Group Art Unit: [not yet assigned]

Examiner: [not yet assigned]

Attorney Docket: 132 Div 2-US

IDS TRANSMITTAL

Mail Stop Non-Fee Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

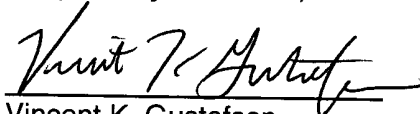
Sir:

Transmitted herewith are the following documents for the above-identified application:

- Transmittal Letter (1 page)
- Information Disclosure Statement (1 page)
- Form PTO-1449 (5 pages)
- Non-U.S. Cited References (41 documents)
- Return Postcard

Applicants have not yet received a first office action on the merits in the above-referenced application, and therefore Applicants believe that no fee is due pursuant to 37 CFR § 1.97(b). If Applicants' belief is incorrect, please charge any necessary fees to our deposit account number 502454.

Respectfully submitted,



Vincent K. Gustafson

Reg. No. 46,182

Dated: January 13, 2004

USPTO Customer No.: 32763

CERTIFICATE OF MAILING
(37 C.F.R. § 1.8)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient first class postage in an envelope addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

January 13, 2004
Date of Deposit

Roger Gendron
Name of Person Mailing Paper

Roger Gendron
Signature of Person Mailing Paper



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:)
HOBBS, Steven E. et al.) Group Art Unit: [not yet assigned]
Title: **SYSTEM AND METHOD FOR**)
PERFORMING MULTIPLE PARALLEL) Examiner: [not yet assigned]
CHROMATOGRAPHIC SEPARATIONS) Attorney Docket: 132 Div 2-US
Serial Number: 10/696,354)
Filed: October 28, 2003)

INFORMATION DISCLOSURE STATEMENT

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO-1449 and copies of only the "Foreign Patent Documents" and "Other Documents" are enclosed for the convenience of the Examiner. Copies of the "U.S. Patent Documents" are not enclosed pursuant to the notice dated July 11, 2003 from the Office of Patent Legal Administration (appearing on the "News & Notices" section of the USPTO website) waiving the requirement to supply such citations in applications filed after June 30, 2003. If, however, the Examiner would find it helpful to have the U.S. citations, Applicants will supply them at the request of the Examiner.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed that any such patent, publication, or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

Respectfully submitted,

Vincent K. Gustafson
Reg. No. 46,182

Dated: January 13, 2004

USPTO Custom r No.: 32763

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT**

APPLICANT:

HOBBS, Steven E. et al.

FILING DATE:

October 28, 2003

GROUP:

[not yet assigned]

(Us several sheets if necessary)

U.S. PATENT DOCUMENTS

INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A1	6,627,446 B1	9/30/2003	Roach et al.	436	43	7/2/1998
	A2	2003/0180711 A1	9/25/2003	Turner et al.	435	4	2/21/2003
	A3	6,613,581 B1	9/2/2003	Wada et al.	436	518	8/17/2000
	A4	2003/0162304 A1	8/28/2003	Dority et al.	436	180	2/25/2002
	A5	2003/0150555 A1	8/14/2003	Gandhi et al.	156	292	2/6/2003
	A6	6,581,441 B1	6/24/2003	Paul	73	61.52	2/1/2002
	A7	2003/0089663 A1	5/15/2003	Petro et al.	210	656	8/28/2002
	A8	6,547,941 B2	4/15/2003	Kopf-Sill et al.	204	452	7/31/2001
	A9	6,537,506 B1	3/25/2003	Schwalbe et al.	422	130	2/3/2000
	A10	6,537,501 B1	3/25/2003	Holl et al.	422	101	10/28/1999
	A11	6,533,840 B2	3/18/2003	Martin et al.	95	45	11/13/2001
	A12	6,532,978 B1	3/18/2003	Müller-Kuhr et al.	137	1	11/22/1999
	A13	2002/0199094 A1	12/26/2002	Strand et al.	713	150	12/27/2001
	A14	2002/0189947 A1	12/19/2002	Paul et al.	204	461	8/29/2001
	A15	6,494,614 B1	12/17/2002	Bennett et al.	366	336	9/21/1999
	A16	6,491,816 B2	12/10/2002	Petro	210	198.2	9/18/2001
	A17	2002/0158022 A1	10/31/2002	Huang et al.	210	656	4/5/2002
	A18	6,437,345 B1	8/20/2002	Bruno-Raimondi et al.	250	458.1	11/14/2000
	A19	6,430,512 B1	8/6/2002	Gallagher	702	22	12/29/1998
	A20	6,410,915 B1	6/25/2002	Bateman et al.	250	288	6/17/1999
	A21	6,404,493 B1	6/11/2002	Altendorf	356	337	5/19/2000
	A22	2002/0041827 A1	4/11/2002	Yager et al.	422	57	5/22/2001
	A23	2002/0036018 A1	3/28/2002	McNeely et al.	137	806	9/27/2001

EXAMINER:**DATE CONSIDERED:**

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT**

APPLICANT:

HOBBS, Steven E. et al.

FILING DATE:

October 28, 2003

GROUP:

[not yet assigned]

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A24	2002/0008032 A1	1/24/2002	Hayenga	204	603	6/25/2001
	A25	2002/0003001 A1	1/10/2002	Weigl et al.	137	806	5/23/2001
	A26	6,318,157 B1	11/20/2001	Corso et al.	73	61.52	4/20/2000
	A27	6,296,771 B1	10/2/2001	Miroslav	210	656	10/1/1999
	A28	6,264,892 B1	7/24/2001	Kaltenbach et al.	422	68.1	1/11/2000
	A29	6,235,471 B1	5/22/2001	Knapp et al.	435	6	4/3/1998
	A30	6,191,418 B1	2/20/2001	Hindsgaul et al.	250	288	4/29/1998
	A31	6,167,910 B1	1/2/2001	Chow	137	827	1/14/1999
	A32	6,136,414	10/24/2000	Aizawa et al.	428	156	12/17/1998
	A33	6,129,973	10/10/2000	Martin et al.	428	166	9/26/1997
	A34	6,074,725	6/13/2000	Kennedy	428	188	12/10/1997
	A35	6,073,482	6/13/2000	Moles	73	53.01	1/20/1999
	A36	6,066,848	5/23/2000	Kassel et al.	250	288	11/3/1998
	A37	6,048,498	4/11/2000	Kennedy	422	99	11/12/1998
	A38	5,917,184	6/29/1999	Carson et al.	250	288	2/7/1997
	A39	5,882,571	3/16/1999	Kaltenbach et al.	264	400	3/27/1997
	A40	5,872,010	2/16/1999	Karger et al.	436	173	7/3/1996
	A41	5,846,396	12/8/1998	Zanzucchi et al.	204	601	11/9/1995
	A42	5,792,943	8/11/1998	Craig	73	61.52	4/30/1997
	A43	5,744,366	4/28/1998	Kricka et al.	436	63	11/14/1994
	A44	5,690,763	11/25/1997	Ashmead et al.	156	60	6/6/1995
	A45	5,658,413	8/19/1997	Kaltenbach et al.	156	272.8	6/7/1995
	A46	5,571,410	11/5/1996	Swedberg et al.	210	198.2	6/7/1995

EXAMINER:**DATE CONSIDERED:**

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT**
APPLICANT:

HOBBS, Steven E. et al.

FILING DATE:

October 28, 2003

GROUP:

[not yet assigned]

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A47	5,376,252	12/27/1994	Ekström et al.	204	299 R	11/10/1992
	A48	5,070,606	12/10/1991	Hoopman et al.	29	890.03	10/4/1989

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION?	
						YES	NO
	B1	WO 03/054524 A1	7/3/2003	WIPO	Staats		
	B2	WO 03/052428 A1	6/26/2003	WIPO	Spute et al.		
	B3	WO 02/30486 A2	4/18/2002	WIPO	Manager et al.		
	B4	WO 02/28532 A2	4/11/2002	WIPO	Strand et al.		
	B5	WO 02/28509 A2	4/11/2002	WIPO	Strand et al.		
	B6	WO 02/10732 A1	2/7/2002	WIPO	Ausserer et al.		
	B7	EP 1 106 244 A2	6/13/2001	EPC	Bergh et al.		
	B8	WO 01/38865 A1	5/31/2001	WIPO	Harrison et al.		
	B9	WO 01/30490 A1	5/3/2001	WIPO	Schaevitz et al.		
	B10	WO 01/14064 A1	3/1/2001	WIPO	Unno et al.		
	B11	WO 01/09598 A1	2/8/2001	WIPO	Holl et al.		
	B12	WO 00/72970 A1	12/7/2000	WIPO	Petersen et al.		
	B13	WO 00/31528	6/2/2000	WIPO	Müller-Kuhrt et al.		X
	B14	WO 00/21659	4/20/2000	WIPO	Burdon et al.		
	B15	WO 99/19717	4/22/1999	WIPO	Bjornson et al.		
	B16	WO 98/45693	10/15/1998	WIPO	Soane et al.		
	B17	WO 98/07069	2/19/1998	WIPO	Mastrangelo et al.		
	B18	WO 95/02178	1/19/1995	WIPO	Burke-Brigham et al.		

EXAMINER:**DATE CONSIDERED:**

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT**

APPLICANT:

HOBBS, Steven E. et al.

FILING DATE:

October 28, 2003

GROUP:

[not yet assigned]

(Us several sh ets if n c ssary)

JAN 10 2004

NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

C1	Zhang, Bailin et al., <i>High-Throughput Microfabricated CE/ESI-MS: Automated Sampling from a Microwell Plate</i> , "Analytical Chemistry," Vol. 73, No. 11, June 1, 2001, pp. 2675-2681
C2	Abian, J., <i>The Coupling of Gas and Liquid Chromatography with Mass Spectrometry</i> , "Journal of Mass Spectrometry," 34, 157-168, (1999)
C3	Kameoka, Jun et al., <i>A Polymeric Microfluidic Chip for CE/MS Determination of Small Molecules</i> , "Analytical Chemistry," Vol. 73, No. 9, May 1, 2001, pp. 1935-1941
C4	Svedberg, Malin et al., "Electrospray from a Plastic Chip," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 335-336
C5	"Multi-parallel HPLC," Web document published at: http://www.sepiatec.com/download/phplc.pdf , date unknown
C6	God, Ralf et al., "Using multiparallel HPLC for purification in drug discovery from nature," Application Note, 2003, International Scientific Communications, Inc.
C7	Zhang, B. et al., <i>Microfabricated Devices for Capillary Electrophoresis-Electrospray Mass Spectrometry</i> , "Analytical Chemistry," Vol. 71, No. 15, August 1, 1999, pp. 3258-3264
C8	Moore, Roger E. et al., <i>A Microscale Electrospray Interface Incorporating a Monolithic, Poly(styrene-divinylbenzene) Support for On-Line Liquid Chromatography/Tandem Mass Spectrometry Analysis of Peptides and Proteins</i> , "Analytical Chemistry," Vol. 70, No. 23, December 1, 1998, pp. 4879-4884
C9	Little, David et al., "A Parallel LC-MS/MS System for High Throughput Quantification in Drug Discovery," Application Note 248, Waters/Micromass, May 2000
C10	Dunn, John A. et al., "A Parallel LC/MS/MS System for the High Throughput Quantification of Clinical Trial Samples. A Validation Study," Application Note, Waters/Micromass October 2002
C11	Tan, Aimin et al., <i>Chip-Based Solid-Phase Extraction Pretreatment for Direct Electrospray Mass Spectrometry Analysis Using an Array of Monolithic Columns in a Polymeric Substrate</i> , "Analytical Chemistry," Vol. 75, No. 20, October 15, 2003, pp. 5504-5511
C12	Lin, Yuehe et al., "Microfluidic Devices on Polymer Substrates for Bioanalytical Applications," Web document published at: www.pnl.gov/microcats/aboutus/publications/microchemical/Microtechpresentation.pdf , 1999
C13	Finot, Michael et al., "High Throughput Pharmaceutical Formulation Evaluation and Analysis Using Capillary Electrochromatography on a Microfluidic Chip," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 480-482
C14	Jemere, Abebaw B. et al., "Microchip-Based Selective Preconcentration Using Protein A Immunoaffinity Chromatography," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 501-502
C15	"HPLC: Micro LC/MS Analysis of Biological Samples," Web publication; http://www.sge.com , 4/1/1998
C16	Chou, Hou-pu et al., "Disposable Microdevices for DNA Analysis and Cell Sorting," Proc. Solid-State Sensor and Actuator Workshop, SC, June 8-11, 1998, pp. 11-14
C17	Delamarche, Emmanuel et al., <i>Microfluidic Networks for Chemical Patterning of Substrates: Design and Application to Bioassays</i> , "Journal of the American Chemical Society," 1998, 120, 500-508
C18	Harley, John C. et al., "System Design of Two Dimensional Microchip Separation Devices," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 63-65
C19	Sato, Kiichi et al., "Integrated Immunoassay System Using Multichannel Microchip for Simultaneous Determination," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 511-512
C20	Voldman, Joel et al., <i>An Integrated Liquid Mixer/Valve</i> , "Journal of Microelectromechanical Systems," Vol. 9, No. 3, September 2000

EXAMINER:**DATE CONSIDERED:**

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

FORM PTO-1449 LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT JAN 16 2004 (Use sev ral sheets if n cessary)	ATTY. DOCKET NO. 132 Div 2-US	SERIAL NO. 10/696,354
	APPLICANT: HOBBS, Steven E. et al.	
	FILING DATE: October 28, 2003	GROUP: [not yet assigned]

NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
C21	Duffy, David C. et al, <i>Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane)</i> , "Analytical Chemistry," Vol. 70, No. 23, December 1, 1998, pp. 4974-4984	
C22	Seiler, Kurt et al., <i>Planar Glass Chips for Capillary Electrophoresis: Repetitive Sample Injection, Quantitation, and Separation Efficiency</i> , "Analytical Chemistry," 1993, 65, 1481-1488	
C23	MacNair, John E. et al., <i>Ultrahigh-Pressure Reversed-Phase Capillary Liquid Chromatography: Isocratic and Gradient Elution Using Columns Packed with 1.0-μm Particles</i> , "Analytical Chemistry," Vol. 71, No. 3, February 1, 1999, pp. 700-708	

EXAMINER:	DATE CONSIDERED:
EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant	